AN ANALYSIS OF STUDENT-ATHLETES ACADEMIC PERFORMANCE DURING THE SEASON COMPARED WITH THE OFF SEASON

A RESEARCH PROJECT

Submitted to the Department of Teacher Education, University of Dayton, in fulfillment of the requirements for the degree of Master of Science in Education

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July 12, 1996

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Chapter I

INTRODUCTION

Purpose for the Study

In this day and age, many school districts face serious financial problems. School Boards, especially ones with shrinking revenues due to levy failures, must decide which programs to keep and which ones to cut. Extracurricular activities, specifically athletics, appear to be the starting point where school boards begin to cut the budget.

Athletics and academics should be partners, not antagonists, in the quest to help students realize their potential. Both should be part of the core curriculum, one shouldn't be listed as extra. Athletic participation is every bit as important an educational experience as the classroom experience (Durbin, 1986).

Many school boards want to raise the eligibility requirements of the interscholastic athletics. Initially, this appears to be a very noble and lofty goal, but the skills and traits acquired by participating in athletics should be available to all students (Petress, 1987). Many so-called "experts" are calling for "no pass, no play" rules or a "C" average requirement. Are these more stringent requirements intended to penalize a lack of proficiency or lack of effort? (Scholastic Coach, 1989) Study after study shows that participation in athletics has a positive impact on the education aspirations and attendance of at-risk students (Melnick, Sabo, and Vanrossen, 1992). Therefore, under these requirements, the students who would benefit the most from athletics would be denied participation.

Also, the author has experienced several parents who believe that by denying their son or daughter the opportunity to participate in interscholastic athletics their academic performance will improve. These parents are under

the assumption that time spent at practice or contests will be used studying. Research tends to support the opposite, participation improves academic performance, or at the very least is inclusive. In a survey of 58,000 high school juniors and seniors, athletes were generally better students than non-athletes (Haynes, 1990). In another survey, it was revealed that athletes earned better grades when they did participate (Durbin, 1986). Research also indicates that athletes and non-athletes spend practically the same amount of time doing homework and studying (Anderson, 1990). A U.S. Department of Education study of public school seniors says those who participate in extracurricular activities are three times as likely to have a grade point average of 3.0 or better out of a 4.0 scale than those who don't participate.

Are student athletes' grades adversely affected during those grading periods or semesters when they are actively participating in sports?

Specifically, is there any data that indicates student athletes fail more often while actively participating in interscholastic athletics than during those semesters when they aren't competing? (Soltz, 1986)

There is overwhelming evidence from several sources that supports the expectation that participation in interscholastic athletics and academic achievement are related. That participation in interscholastic sports improves grades, keeps students in school, and raises their educational expectations.

Obviously, there is a relationship between athletics and academic achievement. The precise nature of this relationship must be further clarified and refined.

Statement of the Problem

The purpose of this project is to evaluate the effects of participating in interscholastic athletics on a student athlete's academic performance during the season as compared with the off season.

Hypothesis

There will be no significant difference between a student athletes academic performance during the season as compared with the off season.

Assumptions

Since the majority of the information will come directly from the school's data base, the assumption is that the student athletes will answer the survey questionnaire honestly.

Limitations

There may be several limitations to this study. One of them, may be the sample size of the student athlete's analyzed. Another, is that many of the student athletes will be in different classes with different teachers. The grading scale will be the same, but the requirements for each class will be different. A final limitation, is the amount of practice time used by certain teams. Therefore certain student athletes may have more time to study and do homework due to their practice schedule.

Definition of Terms

Student Athlete's - This refers to students who are involved in interscholastic athletics.

Academic Performance - This will be the student athlete's average grade of his/her academic courses expressed as a percentage out of one hundred (i.e. 83%).

Off Season - This will refer to the months when a student athlete isn't involved in organized practice and games.

Interscholastic Athletics - This refers to school sponsored sports teams that compete against other school sponsored sports teams sanctioned by the Ohio High School Athletic Association.

In Season - This will refer to the months when a student athlete is involved in interscholastic athletics.

Academic Courses - This refers to the core disciplines of Math, Science, English, Social Studies in addition to Foreign Language and Health classes.

Chapter II

LITERATURE REVIEW

Positive Effects of Athletic Participation

Fortunately, the last three decades have seen a strong interest by a large number of researchers in understanding the social and educational consequences of the interscholastic athletic experience. The sheer quantity of the research is impressive and the number of studies now numbers in the hundreds. The consequences of interscholastic athletic participation on grades, social values, popularity, graduation rates, delinquent behavior, self-esteem, educational aspirations, occupational aspirations and status, competitive orientation, and parents' and teachers' academic encouragement are just some of the variables that have received attention.

Numerous studies have been conducted on participation in interscholastic athletics on its effects on the participants. The majority of the studies indicate that participation in high school athletics has positive effects on the participants. Athletic participation seems to have a positive effect on the educational aspirations of student athletes (Melnick, Sabo, and Vanrossen, 1992). This effect isn't restricted to just male athletes. Athletic participation seems to have a positive effect on the self confidence of female student athletes (Lirgg, 1992). In study after study, the positive effects of high school athletics have been proven time and time again. For example, athletic participation seems to have a positive effect on the self-esteem of student athletes (Melnick, Sabo, and Vanrossen, 1992). Also, another study indicated that participation in high school sports is good and that positive outcomes of involvement are inevitable (Grendorfer, 1987).

There have also been numerous studies on the relationship between athletic participation and academic achievement. It's very difficult to isolate this relationship with so many other factors affecting the student athlete. Study after study has tried and the results of some of those studies will be shared:

* There was no adverse effect on academic performance from participation in athletics when an entire high school career was considered (Hood, Craig, and Ferguson, 1987).

* Students who participate in high school athletics perform better academically than non participants (Kirk and Kirk, 1990).

* Participants in high school athletics usually perform better academically than non participants (Durbin, 1986).

* Student athletes grades are consistently higher, on the average, than students who aren't active in sports (Soltz, 1986).

* Participants in high school athletics attain better grades than non participants , and better grades while participating than when they did not participate (Durbin, 1986).

While academic performance is very important at the high school level, participating in interscholastic athletics has an impact on the total educational experience. For example, in 1968, a court in Nashville, Tennessee ruled that "It's universally recognized that a secondary school athletic

program is an integral part of a students total educational experience" (Kelly vs. Metropolitan County, TN., 1968).

Also, a number of studies have reported that athletes not only attain higher GPA's than other students, but that their educational aspirations, self-concepts, and other effective characteristics are enhanced by participation (Soltz, 1986). It has been pointed out in several studies that interscholastic athletics are an important part of the overall total educational purpose of schools and that participation is valuable in its own right to the total educational experience (Durbin, 1986).

Another effect on interscholastic athletic participation is that it helps aid in the development of basic skills and values. Research indicates that athletic participation can help develop the basic academic and leadership skills necessary for future success in higher education (Feltz and Weiss, 1984). Other studies reveal that athletic participation helps develop basic values such as self-respect, self-esteem, competitive spirit, and teamwork (Durbin, 1986). Also, research has shown that participation in interscholastic athletics helps develop and sharpen basic skills such as self-control, responsibility, confidence, and the value of practice and repetition (Petress, 1987).

School administrators in almost every district try to improve attendance rates. Participation in interscholastic athletics also effects school attendance. Studies using African-American student athletes in rural areas indicate that athletic participation improves attendance (Melnick, Sabo, and Vanrossen, 1992). Also, when attendance records of participants in interscholastic athletics are compared with non participants, the participants have better school attendance records (Durbin, 1986).

The previous paragraphs have documented that participation in interscholastic athletics has numerous positive effects on its participants.

Research has proven this time and time again. Several studies, out of the hundreds that have been conducted over the last three decades are highlighted in this literature review.

Chapter III

PROCEDURE

Subject

The student athletes that will be used in this study are high school seniors. The student athletes will be both male and female and approximately fifteen percent minority.

Setting

School. The school that will be used in this study is a large suburban high school with approximately two thousand students. Fifteen percent of the student body is made up of minorities and another eight percent are on the Federal School Lunch Program.

Community. The community is one that is very diverse. The price for a home in this community can range from thirty thousand dollars at the low end to over three hundred thousand dollars at the high end. The average price for a home is approximately eighty thousand dollars. The majority of the community is a mixture of blue and white collar workers with traditional middle class values.

Data Collection

Construction of Instrument. The data will be collected by reviewing the transcripts of the student athletes involved in the project and comparing their in-season grades with their off-season grades.

The sample chosen for this study will be chosen randomly. Twelve male student athletes and eight female student athletes will be chosen from a population of fifty three male student athletes and thirty eight female student athletes. The ratio of male student athletes to female student athletes in this

school is approximately three male student athletes to two female student athletes.

Procedure

The study is a longitudinal study reviewing the academic performance of each student athlete for the first three years of their high school careers. Academic performance of each student athlete is compared quarterly (the school year is divided into four nine-week grading periods or quarters). Twenty student athletes were used. The breakdown of the student athletes is as follows:

Males 12

Females 8

White(Caucasian) 15

Minorities 5

Academic performance of the student athletes will be tracked over a three year period. Some athletic seasons don't correspond with a grading period. For example, football, soccer, and cross-country generally last the majority of the first grading period. Winter sports such as basketball and wrestling don't start until the middle of November and usually end by mid-February (depending on the performance of the team or individual). Therefore, their seasons span two grading periods. In cases involving winter sports student athletes, the researcher considered both second and third quarter grades as being in-season.

Design

The design for this will be very simple and direct. The student athletes average performance in their academic classes during the season will be compared with the student athletes average performance in their academic classes in the off-season. The performance of the student athletes will be

presented as a percentage grade out of one hundred. The grading is based on a ten point system counting backwards from one hundred percent which would be a perfect score. Academic classes for use of this study didn't include Physical Education, Band, Chorus, Woods I, Woods II, Art I, Art II, or any classes from the Home Economic Department. Academic classes for this study included all English, Math, Social Studies, Science, Foreign Language, and Health courses.

Treatment

The manipulation will be participation in interscholastic athletics.

Table 1

MEAN ACADEMIC AVERAGE DURING AN ATHLETIC SEASON

Interscholastic Athletes

(N=20)

Mean	SD
82.1	9.0

Table 2

MEAN ACADEMIC AVERAGE DURING THE OFF-SEASON

Interscholastic Athletes

(N=20)

Mean	SD
81.9	9.56

Table 3

ACADEMIC AVERAGE OF MALE STUDENT ATHLETES

Athletic Season	Off-Season
81.1	80.3

Table 4

ACADEMIC AVERAGES OF FEMALE STUDENT ATHLETES

Athletic Season	Off-Season
83.7	84.2

SURVEY - STUDENT/ATHLETE STUDY HABITS

Instructions - Please circle the appropriate response on the answer sheet as how it pertains to your study habits.

1. On how many athletic teams per school year do you participate as a member?

a) 1 b) 2 c) 3 d) more than 3

2. How many hours each night (Sunday - Thursday) do you spend studying during the season?

a) 1 b) 2 c) 3 d) more than 3

3. How many hours each night (Sunday - Thursday) do you spend studying out of season?

a) 1 b) 2 c) 3 d) more than 3

4. Does the time designated for studying _____ during the season.

a) increase b) decrease c) stays the same

5. Do you feel your academic performance _____ while participating on an athletic team.

a) improves b) deteriorates c) stays the same

Chapter IV

RESULTS

The performance of all student athletes will first be presented. The sample will then be divided by gender. Their academic performance will be analyzed based on previously stated procedures. Results will then be discussed as how they reflect previous research done on this topic.

The results of this study generally reflect similar findings to other research that has been reported. Of the twenty student athletes who participated, eleven student athlete's grades improved during the season. Nine student athlete's grades improved during the off-season. One student athlete's grades stayed the same and remained consistent throughout his high school career.

In terms of actual percentage grades, there was relatively no discernible difference between the academic performance during the season and the off-season. Overall, during their three year careers, the twenty student athletes who participated in this study, had percentage grades that averaged eighty - two point two percent (82.2%). Compared with their cumulative averages during the off-season which averaged out to be eighty - one point nine percent (81.9%).

When the results of the study are broken down by gender the results differ somewhat. Male student athletes performed better academically during the season (81.1 average) than the off-season (80.3 average). On the other hand, female student athletes performed better academically during the off-season (84.2 average) as compared with their grades during the season (83.7 average).

Most of the previous research done on academic performance and interscholastic athletic participation compare participants with non

participants. The previous research comparing in-season academic performance and off-season academic performance is inconclusive. Like the results in this study and the student athletes perceptions(that are reflected in the survey), academic performance improved during the season(even if it was a slight improvement).

An interesting note is that the student athletes in this study believe that their academic performance and study habits improve during the season. Ninety five percent of those surveyed believed their academic performance improved during the season. Ninety percent surveyed responded that the time designated for studying increases during the season.

Chapter V

Summary

The justification for this study is to show the importance of interscholastic athletics as it relates to the total educational experience. The study was hoping to show that participation in interscholastic athletics has a significant positive impact on the academic performance of student athletes. This didn't occur.

Athletics and academics should be partners, not antagonists, in helping students grow and learn. In a recent convention of the National Association Secondary School Principals, this organization made a proposal to list interscholastic athletics(and other activities) as "co-curricular" instead of "extra-curricular." Study after study, has indicated that participants in interscholastic athletics perform better academically, have better attendance records, better discipline records, and higher self-esteem than non participants. Therefore, as school boards debate raising eligibility requirements or as parents consider denying their son or daughter the opportunity of participating in interscholastic athletics to improve academic performance, the flaws in this logic should be pointed out.

The purpose of this project is to evaluate the effects of participating in interscholastic athletics on student athletes academic performance during the season as compared with the off-season.

The hypothesis is that there will be no significant difference between a student athletes academic performance during the season as compared with the off-season.

The procedures used in this study were as follows: a large suburban high school with an approximate enrollment of two thousand students, was used to select the student athletes. Only senior student athletes were used.

This was a longitudinal study encompassing the first three years of the subjects high school careers. The data will be collected by reviewing the transcripts of the student athletes involved. A comparison of their in-season grades and off-season grades.

The sample chosen for this study was chosen randomly. Twelve male student athletes and eight female student athletes were chosen from a population of fifty three senior male student athletes and thirty eight female senior student athletes. The grades earned in each academic class were tallied and averaged for each student athlete. The transcripts were divided by grading periods(four nine week quarters) in which student athletes were participating in athletics and when they weren't participating.

The results of this study proved the hypothesis to be correct. There was no significant difference between academic performance during the season and the off-season. The average grade earned during the season was eighty two point two percent (82.2). The average grade earned during the off-season was eighty one point nine percent (81.9).

Conclusions

The most significant conclusion drawn from this study is that data strongly suggests that student athletes' grades do not suffer as a result of participation in sports. To the contrary, overall student athletes' academic performance improved slightly during the season.

The reasons for this finding aren't clear. Could it be student athletes take fewer courses during competition? Or save the more difficult courses for the semesters when they aren't competing? Or, during an athletic season, when time is at a premium, is it also used more efficiently? Possibly the student athlete maintains a good academic record in order to remain on the team.

It's extremely difficult to determine from the data which, if any, of these interpretations of the data was correct. Since, most of the findings are consistent with previous research on interscholastic participation and academic performance, the reasons for this relationship need to be examined.

There are several other questions of interest that could also be examined such as: Would some of these students achieve high grades regardless of interscholastic participation? How involved in the school are the parents of participants compared to non participants? How do participants in interscholastic athletics compare to non participants?

Recommendations

As a result of this study, interscholastic athletics should be listed as co-curricular activities in stead of extra-curricular. It's apparent from the data collected in this study and in previous research that athletics and academics work as partners in the total education of students. There is an abundance of evidence available to support the educational result of athletic participation.

For example, two national surveys reveal that participation in interscholastic athletics(rather than high grade point averages and test scores) is the surest predictor of success in later life or realization of success in chosen career fields (Durbin, 1986). Besides just the academic benefits, participants in high school sports have better daily attendance records and are involved in far fewer disciplinary problems than their non participating counterparts.

Also, there are positive benefits supportive of the contention that interscholastic athletes are laboratory courses in human relations as well as physical and emotional development. Although intangible in terms of empirical information, most educators as well as critics readily admit that athletic participation helps develop basic values such as: self-respect, self-esteem, self-confidence, and competitive spirit (Durbin, 1986). These

intangibles are educational experiences as important as any grade earned in any academic classroom.

In the district under study, the grading scale has been changed from a ten point scale, starting at sixty percent as the lowest "D" (or passing grade) and increasing by ten points for the next grade level (60-69 -D, 70-79 -C, 80-89 -B, 90-100 -A) to the following scale:

90-100 A

83-89 B

77-82 C

70-76 D

To help student athletes adjust to this change, tutorial services should be provided. Also, a study should be done in this first year, to find out exactly how many student athletes will be denied participation in interscholastic athletics under the new grading scale as opposed to the previous grading scale. Since all grades in this district are recorded by both a letter grade and numerically, this data would be easily accessible.

Comprehensive research in the district under study should be conducted comparing participants in interscholastic athletics with non participants. This comprehensive study should include not only academic performance, but daily attendance records, disciplinary records, drop-out rates, and test scores(both state proficiency and college entrance exams).

The factors affecting student academic performance are numerous, complex, and intricate. They range from parental involvement to socio-economic background to participation in extra-curricular activities, specifically athletics. The data in support of interscholastic athletics enhancing academic performance is overwhelming and therefore every effort

should be made to make sure interscholastic athletics remain an integral part of the total education of the high school student.

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